

Claims

1. A method for generating synthesized speech, comprising:
receiving input text;
determining a topic for the input text;
determining a speaking style based on the identified topic, where the speaking style correlates to prosodic parameters; and
converting the input text to audible speech using the prosodic parameters.
2. The method of Claim 1 wherein the step of determining a topic for the input text further comprises:
defining a plurality of anticipated topics, such that each anticipated topic is associated with keywords that are indicative of the topic;
determining frequency of the keywords in the input text; and
selecting a topic for the input text from the plurality of anticipated topics based on the frequency of keyword occurrences contained therein.
3. The method of Claim 2 wherein the step of determining a speaking style further comprises selecting a speaking style from a plurality of predefined speaking styles, where each speaking style is associated with one or more anticipated topics.

4. The method of Claim 1 wherein the step of converting the input text to audible speech further comprises:

- converting the input text to corresponding phoneme data;
- applying prosodic parameters to the phoneme data, thereby generating a prosodic representation of the phoneme data; and
- generating audible speech using the prosodic representation of the phoneme data.

5. A method for customizing the speaking style of a text-to-speech synthesizer system, comprising:

- receiving input text;
- determining semantic information for the input text;
- determining a speaking style for rendering the input text based on the semantic information; and
- customizing an output parameter of a multimedia user interface of the text-to-speech synthesizer system based on the speaking style, where the text-to-speech synthesizer system is operable to render audible speech which correlates to the input text.

6. The method of Claim 5 wherein the step of determining semantic information further comprises determining a topic for the input text.

7. The method of Claim 5 wherein the step of determining semantic information further comprises partitioning the input text into a plurality of context spaces, and determining a topic for each of the plurality of context spaces.

8. The method of Claim 5 wherein the step of determining a speaking style further comprises selecting a speaking style from a plurality of predefined speaking styles, where each speaking style is associated with one or more anticipated topics.

9. The method of Claim 5 wherein the step of customizing an output parameter further comprises generating synthesized speech.

10. The method of Claim 5 wherein the step of customizing an output parameter further comprises correlating the selected speaking style to one or more prosodic parameters and rendering audible speech for the input text using the prosodic parameters.

11. The method of Claim 5 wherein the step of customizing an output parameter further comprises modifying at least one of an expression of a visually displayed talking head and another attribute of a visual display.

12. A text-to-speech synthesizer system, comprising

a text analyzer receptive of input text and operable to determine semantic information for the input text;

a style selector adapted to receive semantic information from the text analyzer and operable to determine a speaking style for rendering the input text based on the semantic information, where the selected speaking style correlates to one or more prosodic attributes;

a phonetic analyzer adapted to receive input text from the text analyzer and operable to convert the input text into corresponding phoneme data;

a prosodic analyzer adapted to receive phoneme data from the phonetic analyzer and the prosodic attributes from the style selector, the prosodic analyzer further operable to apply the prosodic attributes to the phoneme data to form a prosodic representation of the phoneme data; and

a speech synthesizer adapted to receive the prosodic representation of the phoneme data from the prosodic analyzer and operable to generate audible speech.